

## Q8A1

### HIGH PRECISION NICKEL METAL CORE 5A CLAMP ON CURRENT PROBE

The model Q8A1 current probe/clamp on ct is based on AC transformer technology for use in measurement of AC current, it is suitable for 5A, 10A cable online measurement. With measurement range of 1 mA to 10A AC and frequency range from 40Hz to 200KHz, it has a high accuracy class of 0.1%. It suits for oscilloscope, power quality analyzer, electric energy meter calibrator. Easy to operate everywhere. its technical standard according to EN 61010-1, EN 61010-2-032, IEC60044-1. This model Q8A1 clamp on current probe have been used in many instrument manufacturers.

## Application

1. Power meter;
2. Energy sub-meters;
3. Digital multi-meter;
4. Oscilloscopes meter;
5. Power quality analyzer;
6. Leakage current meter;
7. Data logging/recording;
8. Phase volt-ampere meter;
9. Power quality monitoring;
10. Power and harmonic meters;
11. Multi-function energy meter;
12. CT secondary current detection;
13. Energy meter calibrator (on site);



## Features

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|--|---|
| 1. UL, CE, CNAS mark;  | 2. Holding wire diameter: φ8mm;                 |
| 3. Installation: clamp type design;                                    | 4. 2-128th harmonic measurement;                |
| 5. Frequency 10Hz-2MHz Bandwidth;                                      | 6. Measurement range of 1mA to 12A AC;          |
| 7. Low phase shift for power measurement;                              | 8. High content nickel metal permalloy core;    |
| 9. Conforms to EN 61010-2-032, 600V CAT III;                           | 10. Min 1mA for leakage current measurement;    |
| 11. High precision 0.1% for current measurement;                       | 12. Improved ergonomic design & easy operation; |
| 13. Designed for DMMs, recorders, oscilloscopes, harmonic meters etc.; |   |

## Parameters

### Electrical parameters

Ratio	1000: 1, 2000:1 or 2500:1 (customized)
Accuracy class	0.1 %,0.2%
Primary current	0 - 5A AC, 0 - 10A AC, 0 - 20A AC
Secondary current	0 - 2.5mA, 0-5mA, 0-10mA, 0-20mA AC (customized)
Secondary voltage	0 - 50mV, 0-100mV, 0-200mV, 0-1V, 0-5V AC (customized)
Max. Cont. Input current	24A
Load capacity	$\leq 20\Omega$ , Standard $4\Omega$
Over voltage category	CAT III 600V
Output signal (AC current)	From 0 to 10mA AC at nominal input current
Output signal (AC voltage)	From 0 to 100mV AC at nominal input current
Signal ratio	1mA/A, 1mV/A, 10mV/A, 100mV/A
Frequency range	10Hz-200KHz
Dielectric strength	3KV 50Hz/60Hz at 1minute
Temperature range	-20°C to +55°C
Output	2.5 meter cable with D01 connector
Max. voltage not insulated conductors	720 V
Standard	EN 61010-1, EN 61010-2-032, EN 61010-2-031 IEC60044-1, & IEC61869-2, 600V CAT III
Installation	Clamp type
Output mode	Lead output (2.5m)
Connector	BNC, 4mm banana, Audio plug, customized

### Mechanical parameters

Dimensions (L x W x H) (mm)	42.6x122.5x23
Weight (g)	250
Holding wire diameter (mm)	$\phi 8$
Max. jaw opening (mm)	8
Color	Black
Material	PC+ABS+Polycarbonate, UL94 V0

## Selection guide

Model	Rate Current	Max Current	Secondary	Coil Ratio	Burden Resistance	Accuracy
Q8A1-1-1	1A	1.2A	1mA	1000:1	customized	0.1%
Q8A1-1-2	1A	1.2A	0.5mA	2000:1	customized	0.1%
Q8A1-5-1	5A	6A	5mA	1000:1	customized	0.1%
Q8A1-5-2	5A	6A	2.5mA	2000:1	customized	0.1%
Q8A1-5-3	5A	6A	2mA	2500:1	customized	0.1%
Q8A1-10-1	10A	12A	10mA	1000:1	customized	0.1%
Q8A1-10-2	10A	12A	5mA	2000:1	customized	0.1%
Q8A1-10-3	10A	12A	4mA	2500:1	customized	0.1%
Q8A1-20-1	20A	24A	20mA	1000:1	customized	0.1%
Q8A1-20-2	20A	24A	10mA	2000:1	customized	0.1%
Q8A1-V5-1	5A	6A	50mV	1000:1	customized	0.1%
Q8A1-V5-2	5A	6A	500mV	1000:1	customized	0.1%
Q8A1-V5-3	5A	6A	1V	1000:1	customized	0.1%
Q8A1-V10-1	10A	12A	100mV	1000:1	customized	0.1%
Q8A1-V10-2	10A	12A	1V	1000:1	customized	0.1%
Q8A1-V10-3	10A	12A	5V	1000:1	customized	0.1%
Q8A1-1-12	1A	1.2A	1mA	1000:1	customized	0.2%
Q8A1-1-22	1A	1.2A	0.5mA	2000:1	customized	0.2%
Q8A1-5-12	5A	6A	5mA	1000:1	customized	0.2%
Q8A1-5-22	5A	6A	2.5mA	2000:1	customized	0.2%
Q8A1-10-12	10A	12A	10mA	1000:1	customized	0.2%
Q8A1-10-22	10A	12A	5mA	2000:1	customized	0.2%
Q8A1-10-32	10A	12A	4mA	2500:1	customized	0.2%
Q8A1-20-12	20A	24A	20mA	1000:1	customized	0.2%
Q8A1-20-22	20A	24A	10mA	2000:1	customized	0.2%
Q8A1-V5-12	5A	6A	50mV	1000:1	customized	0.2%
Q8A1-V5-22	5A	6A	500mV	1000:1	customized	0.2%
Q8A1-V5-32	5A	6A	1V	1000:1	customized	0.2%
Q8A1-V10-12	10A	12A	100mV	1000:1	customized	0.2%
Q8A1-V10-22	10A	12A	1V	1000:1	customized	0.2%
Q8A1-V10-32	10A	12A	5V	1000:1	customized	0.2%

**Notes:** Can be customized current probe according to user requirements!